Statement of Qualifications for Brett Ewart, PE

California Registered Civil Engineer, License No. C71511

Education:

Bachelor of Science in Civil Engineering, California State University Sacramento, May 2004 Bachelor of Science in Environmental Studies, California State University Sonoma, May 1996

Experience:

Senior Civil Engineer and Water Planning Manager
September 2012 to Present - City of Sacramento, Department of Utilities

Primary Responsibilities:

- Preparation of planning studies relating to water supply, including the City's Urban Water Management Plans, the Groundwater Master Plan, and the Water Supply Master Plan.
- Management of activities relating to the hydraulic evaluation of the City's water supply.
- Preparation of plans and specifications for pipelines, pump stations, and modifications at the water treatment plants.
- Review and coordinate the response to proposals, studies and environmental documents that may affect the City's water supply.
- Chairman and Board member of the Sacramento Central Groundwater Authority.

Water Planning: Including time in the previous classifications of Junior, Assistant Engineer, and Associate Engineer, possess 12-years of experience in hydraulic modeling and planning the City's domestic water and fire suppression capabilities; Responsible for projecting hydraulic impacts of new developments on the City water system, and approving/rejecting hydraulic studies submitted for proposed developments; Independently designed a hydraulic capacity testing program for the City's aging distribution system, and provided guidance to City employees tasked with implementation; Designed and implemented a hydraulic capacity study of the City's two water treatment plants; Performed a siting analysis for a 4 million gallon water storage reservoir and negotiated the land acquisition; Prepared economic analysis of public works alternatives to select optimum alternatives; Developed a groundwater use strategy to allow the City to participate in a statewide water transfer program; Developed long-term water fluoridation infrastructure plan and negotiated grant funding to support the program; Currently evaluating the placement of new water supply and conveyance alternative that would provide for the City's water supply out to the year 2050. Acting as department lead on evaluating and negotiating the feasibility of a recycled water program within the City; Principal water planner supporting the City's drought response, which has included water demand forecasting, advising senior leadership on limitations in water supply capacity, and development of emergency capacity with nearby water purveyors.

<u>Water Infrastructure Design</u>: Within the role of a Registered Civil Engineer in responsible charge of design, determined infrastructure size and alignment of small to large water piping systems, pumping system, and storage reservoirs; Prepared project cost estimates; Selected materials of construction; Responsible for preparing contract Plans & Technical Specifications meeting all applicable standards/codes; Review/Approve conceptual plans

for internal water distribution main projects and provide design calculation to support the project.

<u>Water Operations Support</u>: Evaluation of hydraulic conditions and water system performance in support of operational needs. Evaluation of technical and business process surrounding the City's efforts to quantify water production history and trends. Implemented hydraulic testing of water distribution mains in the field with department Field staff; Provide guidance to field staff to resolve conflicts in water main repair, and water quality complaints.

<u>Project Management and Implementation</u>: Managed water infrastructure projects throughout design and implementation; Approved/rejected construction submittals; Directed construction activities to ensure design intent was met; Directed and approved construction "Change Orders"; Performed contract administration; Supervised work of staff engineers, technicians and student interns, Wrote "Requests for Proposals" and performed consultant selection, scope & fee negotiations, and overall management of consultant activities; Managed collaborative infrastructure projects with adjacent water purveyors.

Junior/Assistant/Associate Civil Engineer
November 2003 to September 2012 - City of Sacramento, Department of Utilities

Responsible for Water Distribution System Modeling, water infrastructure planning, advanced hydraulic calculations, and for preparing plans and contract specifications for the construction of water & sewer infrastructure as the Engineer of Record.

- Developed chlorine residual management application to meet surface water treatment plant disinfection codes/criteria throughout a variety of flow regimes;
- City representative of a 54-inch microtunneled river crossing and water crossing transmission main;
- Determining the appropriate pump & motor size for city domestic water well program;
- Performed over 60 water infrastructure studies to ensure implementation of an adequate, reliable, long term water supply for city residents;
- Designed and managed construction of over 60,000 lineal feet of water distribution main and associated water services and appurtenances.